

Title (en)
RF ELEMENT DESIGN FOR IMPROVED TUNING RANGE

Title (de)
HF-ELEMENT-DESIGN FÜR VERBESSERTEN ABSTIMMBEREICH

Title (fr)
CONCEPTION D'ÉLÉMENT RF POUR UNE GAMME D'ACCORD AMÉLIORÉE

Publication
EP 4128437 A1 20230208 (EN)

Application
EP 21781253 A 20210402

Priority
• US 202117218781 A 20210331
• US 2021025515 W 20210402
• US 202063005070 P 20200403

Abstract (en)
[origin: US2021313705A1] An antenna and method of using the same are described. In one embodiment, the antenna comprise an array of radio-frequency (RF) radiating antenna elements, wherein each RF radiating antenna element comprises a first conductor stack containing one or more metal layers and having a first set of one or more conductive layers covering a first side of the first conductive stack; a second conductor stack, separated from the first conductor stack, containing one or more conductive layers and having a second set of one or more conductive layers covering a second side of the second conductive stack; and liquid crystal (LC) between the first and second sides of the first and second conductor stacks, respectively.

IPC 8 full level
H01Q 1/38 (2006.01); **H01Q 1/24** (2006.01); **H01Q 1/42** (2006.01)

CPC (source: EP KR US)
H01Q 1/02 (2013.01 - EP); **H01Q 3/28** (2013.01 - EP); **H01Q 3/44** (2013.01 - EP KR); **H01Q 9/0457** (2013.01 - EP KR);
H01Q 15/0086 (2013.01 - KR); **H01Q 21/0012** (2013.01 - EP KR); **H01Q 21/065** (2013.01 - EP KR US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
US 2021313705 A1 20211007; CN 115699453 A 20230203; EP 4128437 A1 20230208; EP 4128437 A4 20240501; JP 2023521048 A 20230523;
KR 20220163395 A 20221209; TW 202207524 A 20220216; WO 2021202962 A1 20211007

DOCDB simple family (application)
US 202117218781 A 20210331; CN 202180036817 A 20210402; EP 21781253 A 20210402; JP 2022560389 A 20210402;
KR 20227035954 A 20210402; TW 110112238 A 20210401; US 2021025515 W 20210402